MEMO

DATE: June 7, 2007

TO: Transportation and Communications Committee

FROM: Richard J. Marcus, Program Manager, (213) 236-1819, Marcus@scag.ca.gov

SUBJECT: High-Speed Ground Transport Business Case

BACKGROUND:
As part of the High Speed Regional Transport (HSRT) system design effort, IBI Group has been developing a business plan approach to financing the high-speed regional system. The HSRT system builds on the effort completed by the Initial Operating Segment and examines an expansion of the system to include access to San Bernardino, Palmdale and San Pedro Bay Ports. Coverage of the HSRT to these locations would allow the system to address the needs of passenger, aviation and goods movement in the regional and tap into the potential business and revenue opportunities.

David Chow of IBI Group will provide an overview of the HSRT concept and preliminary financial results. His presentation will include the purpose and need of the system, a summary of the HSRT system including costs and operating plan, approach to financial analysis and summary of results. Details will be provided on the three core businesses identified in the plan: passenger, aviation and goods movement.

FISCAL IMPACT:
No fiscal impact at this time.

Reviewed by: *Division Manager*

Reviewed by: *Department Director*

Reviewed by: *Chief Financial Officer*

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HSRT Business Plan Summary

Transportation & Communications Committee

June 7, 2007

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CHALLENGES

Southern California's three major transportation challenges (2007 – 2030):

REGIONAL MOBILITY
- Increasing traffic congestion from 2.2m to 5.4m hours of delay
- Unreliability of the roadway system
- Significant environmental and social impacts

AVIATION DEMAND
- Regional demand increase from 80 MAP to 170 MAP
- Growth at LAX and urban airports constrained
- Travel markets of L.A. and O.C. distant from outlying airports with capacity

GOODS MOVEMENT
- San Pedro Ports traffic will more than triple by 2030
- Ports currently handle 43% of all containers entering U.S.
- Shortage of capacity in the ports to keep up with demand
- Significant environmental and health impacts related to current operations

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REGIONAL SOLUTION

Challenges can be addressed by a High-Speed Regional Transport system, a high performance and environmentally sensitive transportation concept.

REGIONAL MOBILITY
- Ability to link the urban centers, serving the needs of commuters
- Reduce the number of private vehicles on the road
- Enable intensification of land uses in conjunction with transit accessibility, encouraging more effective land use patterns (2% Strategy)

AVIATION DEMAND
- Create a link between urban centers and airports
- Enable a higher level of service for airport access and connecting passengers
- Improve airport operations and optimize investment of aviation infrastructure

GOODS MOVEMENT
- Link the San Pedro Ports with planned inland port facilities
- Provide capacity to handle and move containers with little or no impacts

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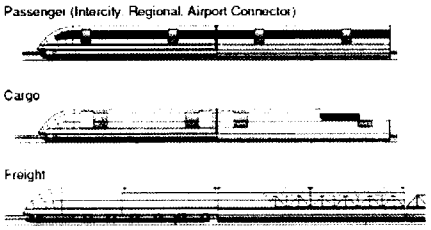
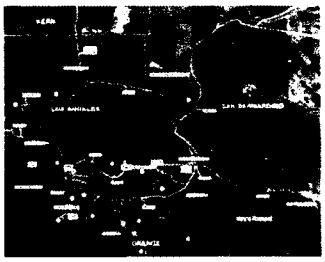
THE HSRT SYSTEM

Development of a High-Speed Regional Transport system builds on the years of technical work completed by SCAG and the Maglev Task Force.
- Fully elevated system over existing public transportation corridors
- Use of high-speed, high-capacity trains traveling at speeds up to 250 mph
- 170 mile system linking L.A. core with strategic locations outside of the basin
- Financially self-sustaining project
- Ability to link the capacity in the region together and get better value from infrastructure investments
- Environmentally friendly mode of transport





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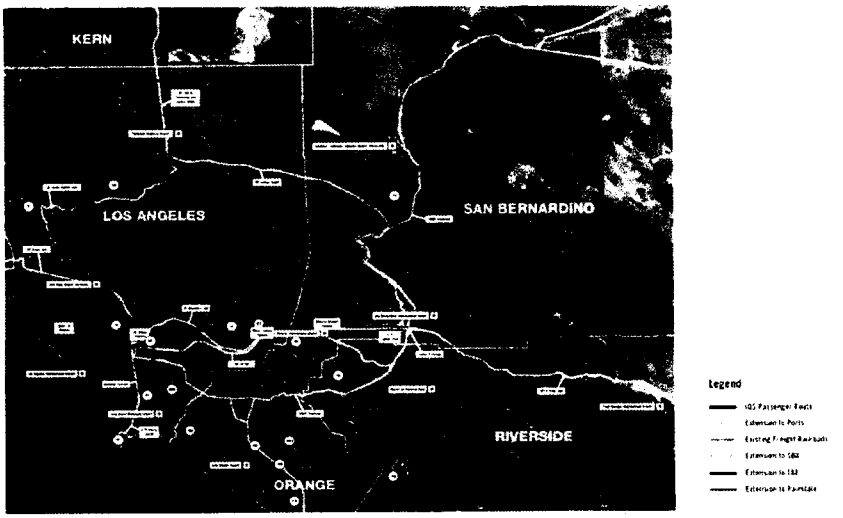
HSRT NETWORK



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HSRT COMPONENTS

There are three primary core businesses to the HSRT proposal.

PASSSENGER TRANSPORT
- Revenue derived from the transport of passengers and associated businesses
- Commuters fares, station parking, station concessions, etc.

AVIATION SYSTEM
- Revenue from airport access and connecting passengers
- Reduction in airport infrastructure needs and costs
- FAA participation opportunities

GOODS MOVEMENT
- Revenue generated from goods movement fees
- Enhancement of capacity to handle goods in the region
- Substitute for significant environmental mitigation requirements in the region

Fourth component is the RELATED DEVELOPMENT POTENTIAL

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PASSENGER TRANSPORT PERFORMANCE

Link the urban centers, serving the needs of the commuters while reducing the number of vehicles on the road.

Reduced congestion, air and noise pollution, and dependence on oil in addition to enhanced accessibility.

Analysis indicates that HSRT serves 5 to 10% of the travel in the corridors.

HSRT Daily Ridership Forecast

Alignment	Total HSRT Daily Ridership Volumes		
	Year 2014	Year 2025	Year 2040
IOS	49.2 T	65.6 T	80.8 T
IOS+LAX	86.2 T	115.0 T	141.6 T
IOS+LAX+PMD	153.8 T	205.1 T	252.6 T
IOS+LAX+SBD	99.9 T	133.1 T	164.0 T
IOS+LAX+PMD+SBD	167.3 T	223.1 T	274.9 T

T – thousands

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AVIATION SYSTEM PERFORMANCE

Provides a high-speed, high-capacity link between urban and regional airports to allow airports to operate conceptually as one single airport system with multiple remote terminals.

Results indicate airport activity from passenger access and connections between airports amount up to 24% of total passenger activity.

Airport Access and Connecting Passenger HSRT Daily Ridership Forecast

Alignment	Airport Related HSRT Daily Ridership Volumes		
	Year 2014	Year 2025	Year 2040
IOS	6.9 T	9.2 T	11.3 T
IOS+LAX	20.5 T	27.4 T	33.7 T
IOS+LAX+PMD	30.2 T	40.2 T	49.6 T
IOS+LAX+SBD	24.3 T	32.3 T	39.9 T
IOS+LAX+PMD+SBD	33.8 T	45.1 T	55.5 T

T – thousands

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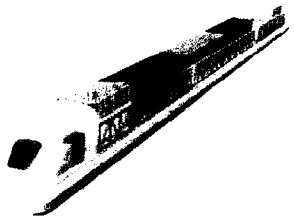
GOODS MOVEMENT PERFORMANCE

A high-capacity, fast and environmentally friendly method of expanding port capacity and goods movement in the region.

The HSRT system is capable of moving over 12,600 container trips per day, over 4.6 million container trips (9.2 million TEU) annually in a shared guideway.

Cargo trains will be a version of the passenger train designed to carry containers and using the same elevated guideway.

Freight operation will run in between passenger service with no degradation of service for passengers.



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HSRT RELATED DEVELOPMENT POTENTIAL

In addition to system performance, value is created in associated real property .

BENEFITS FROM HSRT

- Enhanced accessibility around transit stations and surrounding neighborhoods
- Increased land value and development potential
- More effective land use patterns (consistent with SCAG Compass 2% Strategy)
- New suburban development made possible by extensions to the HSRT system

TYPES OF DEVELOPMENT

- Urban Transit Oriented Development (TOD)
- Suburban TOD
- Development by Goods Movement Centers
- Catalytic Business Creation

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FINANCIAL APPROACH

Challenge of developing a financially defensible approach to project financing.

- Degree of confidence in the cost estimates for capital and operating expenses.
- Level of risk associated with revenue assumed from each of the core businesses.
- More detailed investment quality analysis will be needed in the next phase.

Business plan financial approach addresses the challenges at a level that is sufficient in this stage of the project.

Conservative assumptions used regarding the core business revenues.

Rather than looking at financial gap between cost and revenue, approach identified the fares and fees needed to fully cover capital and operating expenses.

Additional public participation and business opportunities will increase the financial performance of the system.

FINANCIAL PERFORMANCE

HSRT financial performance based on different internal rates of return (IRR) on investment.

26 Year Horizon: IOS+LAX+SBD(4.6M)+PMD(2.2M)+Ports Fees for Various IRR

IRR	CPV	Average Passenger Fare	Freight Fee	
			PMD	SBD
5%	$35.334 M	$18.92	$264.10	$234.54
7%	$34.031 M	$22.90	$297.00	$263.76
9%	$33.062 M	$27.16	$331.42	$294.32
11%	$32.325 M	$31.64	$366.74	$325.68

40 Year Horizon: IOS+LAX+SBD(4.6M)+PMD(2.2M)+Ports Fees for Various IRR

IRR	CPV	Average Passenger Fare	Freight Fee	
			PMD	SBD
5%	$36.757 M	$15.52	$238.80	$212.10
7%	$34.801 M	$19.96	$276.16	$245.26
9%	$33.485 M	$24.75	$314.96	$279.70
11%	$32.562 M	$29.72	$354.24	$314.60

60 Year Horizon: IOS+LAX+SBD(4.6M)+PMD(2.2M)+Ports Fees for Various IRR

IRR	CPV	Average Passenger Fare	Freight Fee	
			PMD	SBD
5%	$37.661 M	$13.96	$226.32	$201.00
7%	$35.162 M	$18.84	$267.86	$237.88
9%	$33.634 M	$24.00	$309.76	$275.10
11%	$32.625 M	$29.25	$351.18	$311.88

FINANCIAL PERFORMANCE

Comparison to current cost to travel on the corridor and move goods. Does not include future costs needed to mitigate congestion and environmental impacts.

THE COST TO DRIVE

West L.A. to Ontario Airport	57	93	32	$32.04	$29.76	$16.62
LAX to Ontario Airport (via Union Station)	67	117	40	$37.66	$34.98	$20.40
LAX to Palmdale Airport (via Union Station)	137	187	82	$77.00	$71.52	$29.46
LAX to San Bernardino Airport (via Union Station)	90	148	52	$50.59	$46.99	$27.20

Costs based on AAA's "Your Driving Costs 2006" report

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FINANCIAL PERFORMANCE

Comparison to current cost to travel on the corridor and move goods. Does not include future costs needed to mitigate congestion and environmental impacts.

TRUCK TRANSPORT COST

Drayage Fee per 40-foot Container	$400	$325
Fuel Surcharge (FSC)	20%	20%
Wait for Unloading (if needed)	$60/hour after 1 hour free	$60/hour after 1 hour free
Dropoff/Bobtail (if needed)	$200 + FSC	$100 + FSC
Chassis Rental (if needed)	$100/day	$100/day
Non-Business Hour Delivery (if needed)	$50	$50
Subtotal Cost per Container	**$480 - $870***	**$390 - $660***

*Note: Upper limit cost assumes drayage fee with fuel surcharge, dropoff charge, chassis rental and non-business hour delivery.

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CONCLUSIONS

HSRT system is a financially competitive and viable solution for the region.

1. The regional problems are eminent and strategically critical to the nation and the region.
2. The problems can only be resolved from a regional perspective. Incremental and partial solutions will not work.
3. The challenges must be solved on a financially viable basis. Otherwise it will be too costly.
4. HSRT is viable through multiple use and competitive with today's cost and significantly less than future costs with the ability to be financially robust.
5. HSRT can be implemented in stages, becoming more viable as additional lines and greater regional connectivity is achieved.

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